AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) An object lens for an optical pickup, said object lens being of finite conjugate type for use in an optical pickup having a unit, in which a semiconductor laser diode array including light emitting portions for respectively emitting light of different wavelengths, a photo detector and said object lens are integrated so that a relative positional relationship between said object lens and said semiconductor laser diode array is fixed ~~are integrally and fixedly arranged~~, and capable of recording data in and reproducing data from a first optical recording medium and a second optical recording medium respectively having recording faces at different heights ~~by irradiating said first optical recording medium and said second optical recording medium with a laser beam through said object lens~~,

a distance from the light outgoing face of the object lens to the surface of said first and second optical recording mediums in an optical system being changed by moving said unit entirely, and

[[curvature]] curvatures and aspheric coefficients of said object lens being defined [[to have]] so that said object lens has a plurality of numerical apertures ~~numerical aperture controlled~~ to be changed in accordance with switching between said different wavelengths, whereby allowing said laser beam to be focused on said first optical recording medium or said second optical recording medium.

2. (Cancelled)

3. (Original) The object lens of Claim 1,

wherein a distance between said light emitting portions of said semiconductor laser diode array is 270 μm or less.

4. (Original) The object lens of Claim 1,

wherein change of the numerical aperture of said object lens is controlled in accordance with the switching between said different wavelengths in such a manner that, in the case where a laser beam of a wavelength suitable to said first optical recording medium is allowed to pass through said object lens for irradiating said first optical recording medium, portions of said laser beam respectively passing through a circular center region including a lens optical axis and a ring-shaped intermediate region around said center region are focused on the recording face of said first optical recording medium, and that in the case where a laser beam of another wavelength suitable to said second optical recording medium is allowed to pass through said object lens for irradiating said second optical recording medium, portions of said laser beam respectively passing through said center region and a ring-shaped peripheral region around said intermediate region are focused on the recording face of said second optical recording medium.

5. (Original) The object lens of Claim 4,

wherein said center region and said intermediate region are defined by an identical lens function.

6. (Currently amended) A method for designing an object lens for an optical pickup,

said object lens being of finite conjugate type for use in an optical pickup having a unit, in which a semiconductor laser diode array including light emitting portions for respectively emitting light of different wavelengths, a photo detector and said object lens are integrated so that a relative positional relationship between said object lens and said semiconductor laser diode array is fixed ~~are integrally and fixedly arranged~~, and capable of recording data in or reproducing data from a first optical recording medium and a second optical recording medium respectively having recording faces at different heights ~~by irradiating said first optical recording medium and said second optical recording medium with a laser beam through said object lens~~,

wherein a distance from the light outgoing face of the object lens to the surface of said first and second optical recording mediums in an optical system being changed by moving said unit entirely, and

[[curvature]] curvatures and aspheric coefficients of said object lens are defined so that said object lens has a plurality of numerical apertures ~~numerical aperture of said object lens is controlled~~ to be changed in accordance with switching between said different wavelengths for allowing said laser beam to be focused on said first optical recording medium or said second optical recording medium.

7. (Previously presented) The object lens of Claim 1,

wherein spherical aberration in a predetermined region of said object lens is changed.